

REMARKS

Claims 1-24 are pending in the application. Of the claims, Claims 1, 9, and 17 are independent claims. Claims 1- 24 are rejected under 35 U.S.C. § 102(e) as being deemed anticipated by Muller et al. (U.S. Patent Number 6,021,132.) That rejection is respectfully traversed and reconsideration is requested.

The cited prior art, Muller is directed to a switch having a single common pool of memory (shared memory) that is shared by all of the input ports and output ports of the switch. (See Col. 6, lines 60-63; Fig. 3A, shared memory (230).) The single common pool of memory includes buffers that have been allocated to ports and free buffers that are available for allocation to any of the input and output ports. All buffers are allocated to ports from the single common pool of memory. As discussed in the applicant's specification, the problem with a single common pool of memory shared by all of the ports is that all of the memory may be consumed storing data for a congested port leaving no memory available for storing data to be forwarded to non-congested ports, which results in data packets being dropped for non-congested egress ports. (See applicant's specification, Page 2, lines 5-8.)

The applicant's claimed invention solves this problem by providing reserved pools of buffers in the shared memory. Each reserved pool of buffers is associated with one of the plurality of egress ports and reserved for storing data to be forwarded to the egress port. The shared memory also includes a shared pool of buffers for storing data to be forwarded to any of the plurality of egress ports. By providing a reserved pool of buffers for each egress port, even if one congested port is using all of its reserved buffers in the shared memory and all available buffers in the shared pool of buffers in the shared memory, a non-congested port has buffers available for allocation in its respective reserved pool of buffers. (See Applicant's Specification Fig. 2, shared memory (108) reserved pool of buffers (202), shared pool (200); Page 5, lines 22-27.)

Thus, Muller's discussion of a single common pool of memory does not teach or suggest at least the Applicant's claimed "a plurality of reserved pools of buffers in a shared memory, each reserved pool of buffers associated with one of a plurality of egress ports and reserved for storing data to be forwarded to the egress port". In contrast, Muller's single common pool of

memory is shared by all of the input and output ports of the switching element and buffers are allocated to all of the ports from the single common pool of memory. There is no suggestion of a "reserved pool of buffers associated with one of a plurality of egress ports and reserved for storing data to be forwarded to the egress port" as claimed by the applicant in claim 1. Furthermore, Muller's discussion of a single common pool of buffers shared by all of the input and output ports does not teach or suggest a multicast pool of buffers in the shared memory reserved for storing IP Multicast data packets. In contrast, all buffers are allocated from the single common pool of buffers.

Claims 2 and 4-8 are dependent on Claim 1 and thus include this limitation over the prior art. Furthermore the dependent claims contain even further distinguishing limitations. For example, claim 5 recites "the sum of the buffers in the multicast pool, the reserved pool and the shared pool is greater than the total number of buffers in the shared memory". With only a single common pool of buffers shared by all of the ports, it is not possible to oversubscribe the pools as claimed by the applicants in dependent claim 5 and described in the applicant's specification on Page 8, lines 8-21.

Independent Claim 17 recites a like distinction in terms of a method and thus similarly patentably distinguishes over the prior art. Claims 18 and 20-24 are dependent on Claim 17 and thus include this limitation over the prior art. Independent Claim 9 and claims dependent on Claim 9 include like limitations distinguishing the cited art.

Accordingly, the present invention as now claimed is not believed to be anticipated by or made obvious from the cited art or any of the prior art. Removal of the rejections under 35 U.S.C. 102(e) and acceptance of Claims 1-2, 4-10, 12-18 and 20-24 is respectfully requested.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

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